Supreme Court, U.S.
FILED
FEB 14 2007
OFFICE OF THE CLERK

No. 05-1056

IN THE

Supreme Court of the United States

MICROSOFT CORPORATION,

Petitioner,

v.

AT&T CORP.,

Respondent.

On Writ Of Certiorari
To The United States Court Of Appeals
For The Federal Circuit

REPLY BRIEF FOR PETITIONER

T. ANDREW CULBERT
MICROSOFT CORPORATION
One Microsoft Way
Redmond, WA 98052
(425) 706-6921

DALE M. HEIST
WOODCOCK WASHBURN LLP
2929 Arch Street
Philadelphia, PA 19104
(215) 564-8939

THEODORE B. OLSON
Counsel of Record
MIGUEL A. ESTRADA
MARK A. PERRY
MATTHEW D. MCGILL
AMIR C. TAYRANI
GIBSON, DUNN & CRUTCHER LLP
1050 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 955-8500

Counsel for Petitioner

RULE 29.6 STATEMENT

The corporate disclosure statement included in the petition for a writ of certiorari remains accurate.

TABLE OF CONTENTS

Page

RULE 29.6 STATEMENT i

TABLE OF AUTHORITIES iii

I. THE FOREIGN-MADE COPIES OF THE MACHINE-READABLE WINDOWS OBJECT CODE WERE NOT "SUPPLIE[D] . . . FROM THE UNITED STATES" 4

II. AN ABSTRACT SEQUENCE OF BINARY COMMANDS—AN *IDEA*—IS NOT ITSELF A "COMPONENT" THAT CAN BE "COMBIN[ED]" TO INFRINGE AT&T'S PATENT 9

A. The Text Of Section 271(f) Makes Clear That "Components" Must Be Physical 10

B. Abstract Object Code Is Not A Component Of The Speech Coding Apparatus Claimed By The '580 Patent 12

C. If Accepted, AT&T's Position Would Radically Transform The U.S. Patent System 13

CONCLUSION 19

TABLE OF AUTHORITIES

Page(s)

CASES

Burr v. *Duryee*, 68 U.S. (1 Wall.) 531 (1864) 9

Cooper Indus., Inc. v. *Aviall Servs., Inc.*, 543 U.S. 157 (2004) 5

Dastar Corp. v. *Twentieth Century Fox Film Corp.*, 539 U.S. 23 (2003) 11

Deepsouth Packing Co. v. *Laitram Corp.*, 406 U.S. 518 (1972) 10

Dewsnup v. *Timm*, 502 U.S. 410 (1992) 17

Diamond v. *Diehr*, 450 U.S. 175 (1981) 16

F. Hoffman-La Roche Ltd. v. *Empagran S.A.*, 542 U.S. 155 (2004) 8

H. Hackfeld & Co. v. *United States*, 197 U.S. 442 (1905) 1

In re Alappat, 33 F.3d 1526 (Fed. Cir. 1994) (en banc) 12

Lytle v. *Household Mfg., Inc.*, 494 U.S. 545 (1990) 6

Mercoid Corp. v. *Minneapolis-Honeywell Regulator Co.*, 320 U.S. 680 (1944) 16

Parker v. *Flook*, 437 U.S. 584 (1978) 17

Rogers v. *United States*, 522 U.S. 252 (1998) 4

United Parcel Serv., Inc. v. *Mitchell*, 451 U.S. 56 (1981) 6

United States v. *Gooding*, 25 U.S. (12 Wheat.) 460 (1827) 5

STATUTES

17 U.S.C. § 106 7

35 U.S.C. § 41(d)(3) 17

35 U.S.C. § 112 12

35 U.S.C. § 271(a) 18

35 U.S.C. § 271(c) 16, 18

35 U.S.C. § 271(f) 1

OTHER AUTHORITIES

BLACK'S LAW DICTIONARY (8th ed. 1999) 4, 5

TRIPS Agreement (1994) 13, 18

HENRY WEIHOFEN, LEGAL WRITING STYLE (2d ed. 1980) 5

RON WHITE, HOW COMPUTERS WORK (8th ed. 2006) 14

REPLY BRIEF FOR PETITIONER

This case comes to this Court on stipulated facts. Although the legal conclusions to be drawn from those facts are for this Court, the facts themselves are binding. *H. Hackfeld & Co.* v. *United States*, 197 U.S. 442, 446 (1905). It thus bears reiterating at the outset what the essential, and indisputable, facts of this case are: "Microsoft makes a limited number of 'golden master' disks in the United States on which the machine-readable object code for the Windows operating system software is stored." Pet. App. 45a ¶ 4. Foreign computer manufacturers then "make . . . copies of the object code" (*id.* at 46a ¶ 9), and "install the *foreign-made copies* of Windows operating system software onto computers." *Id.* at 45a ¶ 5 (emphasis added). The golden master disk "itself is never installed on a computer that is then sold." *Ibid.* Rather, the golden master disk is used by the foreign manufacturer to create "*foreign replicated object code*" (*id.* at 46a ¶ 10 (emphasis added)), which "is then installed on computers that are sold." *Id.* at 45a ¶ 5.[1]

This case thus essentially presents a single overarching question: Whether, by exporting the golden masters containing machine-readable object code from which foreign-replicated copies were made in foreign countries, installed overseas in foreign-made computers, and sold to foreign end-users, Microsoft "supplie[d] . . . from the United States" the "components of a patented invention" in a manner that induced "the combination of such components outside of the United States." 35 U.S.C. § 271(f). AT&T has offered two

---

[1] Microsoft also sends electronic transmissions of object code abroad, but, as AT&T has acknowledged, those transmissions are legally indistinct from golden master disks. Resp. Dist. Ct. Br. 3 n.1. This brief, therefore, will generally use the term "golden master" to refer to both the disks and the electronic transmissions. *See* note 4, *infra*.

mutually exclusive theories to support liability under that provision.

At times, AT&T has argued that the golden masters themselves were the relevant "components," and that foreign-made *copies* of the machine-readable object code could be deemed "supplie[d] . . . from the United States" because, as the Federal Circuit held, "for software 'components,' *the act of copying is subsumed in the act of 'supplying,'* such that sending a single copy abroad with the intent that it be replicated invokes § 271(f) liability for those foreign-made copies." Pet. App. 6a (emphasis added); *see also* Resp. Dist. Ct. Br. 7, 10 (arguing that Microsoft supplied "software on a computer-readable medium (such as the golden masters)"—a "[d]evice or [a]pparatus" that "defin[es] structural and functional interrelationships between the software and the computer"); Tr. Dist. Ct. Oral Arg. 29 (Dec. 12, 2003) (arguing that "the software at issue here" sufficed as a "component" because it was "affixed to some *tangible medium*") (emphasis added).

At other times, AT&T has argued that the relevant component supplied by Microsoft "is not the disk itself, the tangible medium to which the software is affixed," but instead is "the software . . . the object code on that disk," untethered from the physical plane (Tr. Dist. Ct. Oral Arg. 24-25 (Dec. 12, 2003))—or, to use AT&T's more recent formulation, "a binary sequence of numbers that 'lacks physical existence.'" Second Supp. Cert. Br. 4. On this theory, wherever Windows "successfully appear[s]" in a computer, Microsoft has supplied it from the United States. Resp. Br. 26 n.19.

Because AT&T advanced two alternative theories as to what constituted the relevant "component" in the courts below, Microsoft has addressed both theories and has demonstrated that both are meritless: the first because the "components" "combin[ed]" overseas—foreign-made *copies* of the Windows golden masters—were not "supplie[d] . . . from the

United States" (Pet. Br. 13-33); and the second because what Microsoft did supply from the United States—golden masters of the Windows object code—are not themselves and do not contain "components" that were "combin[ed]" overseas (*id.* at 33-44). Those two points answer the two questions presented in Microsoft's petition for a writ of certiorari and restated without material change in its merits brief. *See* Pet. i, Pet. Br. i. And irrespective of the order in which they are addressed, the judgment of the court of appeals should be reversed for either or both reasons.

In this Court, AT&T has all but abandoned the first of its arguments, which was the core rationale of the decision below—that "for software 'components,' the act of copying is subsumed in the act of 'supplying.'" Pet. App. 6a. AT&T now focuses instead on its alternative argument—that Microsoft supplied the Windows object code untethered from any "physical layer" of a computer-related invention, and that such abstract information constitutes a "component" of AT&T's claimed apparatus. But this latest iteration of AT&T's theory fares no better than the now-forsaken ground upon which it prevailed below. If what is in issue is *only* "a binary sequence of numbers that lacks physical existence," as AT&T now claims, then Microsoft has not violated Section 271(f) because abstract information—separated from any physical, machine-readable medium—cannot constitute a "component of a patented invention" that is "combin[ed]" with anything under Section 271(f). If it could, liability under Section 271(f) would necessarily extend to the export of all other abstract knowledge, designs, information, and instructions, thereby massively enlarging the extraterritorial scope of U.S. patents. And because the software components actually combined to form AT&T's patented invention—the physical, machine-readable versions of the Windows program manufactured abroad, without which the foreign-manufactured computers could not function—are not "sup-

plie[d] . . . from the United States," Microsoft is not liable under Section 271(f).[2]

I. THE FOREIGN-MADE COPIES OF THE MACHINE-READABLE WINDOWS OBJECT CODE WERE NOT "SUPPLIE[D] . . . FROM THE UNITED STATES"

1. AT&T argues that "[h]ad Congress wished to limit Section 271(f) to situations where the defendant supplied the same 'material objects' that end up in an infringing device abroad, it would have used language to that effect." Resp. Br. 30. But Congress did *precisely* that. And if Congress wishes to do more, it may certainly do so.

Section 271(f) makes it unlawful to "suppl[y] . . . from the United States" the "components of a patented invention" if "*such* components" are combined overseas to practice the claimed invention. The adjective "such" in this construction means that the "components" it introduces are the *same* as the "components" previously referred to in the same sentence. BLACK'S LAW DICTIONARY 1473 (8th ed. 1999) ("[t]hat or those; having just been mentioned"). Thus, Section 271(f) prohibits supplying components if *those* components are combined overseas. The Court has previously

---

[2] Contrary to AT&T's suggestion (Resp. Br. 17), in no event would AT&T's latest shift in tactics—its sudden willingness to forsake the argument upon which it prevailed below—warrant dismissal of the writ of certiorari. The parties stipulated that the "components" here at issue are "the 'golden master disks' and the encrypted transmissions of Windows object code." Pet. App. 47a ¶ 10. Under that stipulation, the record in this case "'fairly present[s]'" the "question of general application" whether, as the Federal Circuit held, foreign-made copies of a physical component may be "deemed supplied from the United States." Resp. Br. 17 (quoting *Rogers* v. *United States*, 522 U.S. 252, 259 (1998) (plurality op.)); Pet. App. 4a. The Federal Circuit's decision also raises the important and recurring question whether information in the abstract is a "component" under Section 271(f). AT&T cannot avoid review of either question by disavowing its own stipulation or abandoning the reasoning of the Federal Circuit.

given "such" just that definition in construing other statutes. *See, e.g., United States* v. *Gooding*, 25 U.S. (12 Wheat.) 460, 477 (1827) (Story, J.) ("But it is sufficient to say, that the word 'such' has an appropriate sense, and can be reasonably referred only to the ship or vessel previously spoken of .... If we were to adopt any other construction, we should read the words as if 'such' were struck out ....").[3]

AT&T contends that the word "such" "denotes only substantial, not literal, identity between two things," Resp. Br. 34 n.24, but cites no authority for that proposition, because it is wrong. *Black's* gives the following example: "a newly discovered Fabergé egg will be on auction next week; such egg is expected to sell for more than $500,000." *Supra*, at 1473. Obviously, in this example, it is nonsensical to say that "a substantial[ly] ... identi[cal]" egg will be sold at auction. Rather, the *same, identical* egg—"*that* egg"—will be sold. And "such" carries such—the same—sense in Section 271(f).

AT&T's position selectively reads the word "such" out of the statute (conveniently, just two of the eight times that word is used in Section 271(f)), in derogation of the familiar principle that courts will give effect to each word of a statute. *See Cooper Indus., Inc.* v. *Aviall Servs., Inc.*, 543 U.S. 157, 167 (2004). Under Microsoft's construction, by contrast, each of the statutory terms has work to do, none is superfluous, and the statute works harmoniously as a whole.

The statutory phrase "such components" is fatal to AT&T's claim that Microsoft "supplied" components *from the United States*. It is undisputed that the *only* things Mi-

---

[3] *See also* HENRY WEIHOFEN, LEGAL WRITING STYLE 37 (2d ed. 1980) ("The adjective 'such' sometimes serves a useful purpose, as where it saves having to repeat a concept that cannot be referred to in a word or two. In statutes and regulations, for example, it may be necessary to make clear that the second reference is to exactly the same concept mentioned previously. The word 'such' is the simplest way to do so.").

crosoft supplied from the United States were the golden masters, which were *never* combined with other parts to form AT&T's patented invention.[4] And the object code conveyed by those media also was not combined overseas; rather, "foreign replicated" *copies* of the object code were made in foreign countries, by foreign manufacturers, for installation on (and combination with) foreign computers for sale to foreign end-users.

2. In this Court, AT&T tries to say as little as possible about the foreign-replicated *copies* of Windows that were installed on foreign-made computers for sale to foreign end-users. *See* Resp. Br. 30. AT&T instead uses clumsy euphemisms in an effort to avoid discussing the copies that indisputably were made overseas. *See, e.g.*, Resp. Br. 9-10 ("[t]he code is then *transferred* onto the hard drives of foreign-manufactured computers") (emphasis added). And where AT&T does directly address the *copies* of Windows that are made overseas, its arguments make little sense.

AT&T first says that "the word 'copy' appears nowhere in Section 271(f); instead, that provision asks only whether a U.S. person supplied *a* 'component' from the United States." Resp. Br. 30 (emphasis added). But under the statute, that same component—"such component"—must be "combin[ed]" with others in a foreign country. A *copy* made in a foreign country is not the same thing that was supplied from

---

[4] The strained—and incorrect—reading of the stipulated facts advocated by *amicus* BayhDole25, Inc., which argues that the same copy—such copy—of the machine-readable object code sent from the United States by electronic transmission is installed on foreign-assembled computers, was adopted by neither of the parties and by neither of the courts below, and thus is not an available alternative ground for affirmance. *See Lytle* v. *Household Mfg., Inc.*, 494 U.S. 545, 551 n.3 (1990) (Court may not affirm on alternative ground that "was not presented to either court below, nor is . . . supported by arguments in the record"); *see also United Parcel Serv., Inc.* v. *Mitchell*, 451 U.S. 56, 60 n.2 (1981) (Court need not consider arguments raised only by an *amicus curiae*).

the United States. It is well-established that copying and supplying are legally distinct acts, contrary to the Federal Circuit's conclusion that they are the same thing. *See* 17 U.S.C. § 106 (granting copyright holders six exclusive and distinct rights, including the right to reproduce (*i.e.*, copy) a work and the right to distribute (*i.e.*, supply) a work).

Apparently recognizing as much, AT&T resorts to legerdemain: "[i]f the component is non-physical, as object code is, the term 'copy' could have significance," AT&T asserts, "only in describing the different physical-layer media employed for storing, transporting, or using that component. There may be many such media, but the object-code component remains the same." Resp. Br. 30. AT&T thus offers up the concept that object code is omnipresent—apparently, it "move[s] seamlessly" from place to place, such that it spontaneously "appears" on hard drives and other physical media. Resp. Br. 26 n.19, 31. But information does not "move" or "appear" by itself; it must be carried by *some* physical medium in order to be "combin[ed]" with other components. *See* Part II.A, *infra*. AT&T's position is thus at war with the statute.[5]

3. Any residual doubt as to the proper construction of Section 271(f) is resolved by the presumption against extraterritoriality. Under AT&T's expansive reading of the statute, exporting a single master version of a component could give rise to unlimited extraterritorial liability based upon the foreign duplication of that U.S.-supplied master version. Congress gave no indication that it intended for Section 271(f) to effect such a massive expansion of the extraterrito-

---

[5] Contrary to AT&T's contention (Resp. Br. 34), the fact that Microsoft collects royalties on foreign-produced copies hardly shows that Microsoft "supplied" those copies from the United States. A manufacturer of a shrimp deveining machine could send design templates overseas and contractually require a license fee for each copy produced. That manufacturer has no more violated Section 271(f) than Microsoft has.

rial reach of U.S. patent law. *See F. Hoffman-La Roche Ltd. v. Empagran S.A.*, 542 U.S. 155, 174 (2004) (as long as a "statute's language reasonably permits an interpretation consistent with" the presumption that Congress seeks to avoid interference with other nations' sovereignty, a court "should adopt it").

AT&T contends that the presumption is inapplicable because AT&T seeks to hold Microsoft liable for the domestic act of shipping master versions of Windows to foreign manufacturers, rather than for overseas conduct. But AT&T's characterization of its theory of liability is flatly contradicted by the facts to which it stipulated, which establish that AT&T's Section 271(f) claim is premised in its entirety on the installation of *foreign*-replicated copies of the Windows object code on *foreign*-assembled computers marketed to *foreign* consumers. *See* Pet. App. 46a ¶ 10. It is in precisely such circumstances that application of the presumption is needed to ameliorate the risk that U.S. law will interfere with overseas commercial activities and with foreign nations' sovereign prerogatives. *See Empagran*, 542 U.S. at 165; *see also* U.S. Br. 29. Moreover, that Section 271(f) prohibits U.S. companies from supplying U.S.-manufactured components to foreign companies for assembly abroad does not, in the absence of an equally clear statement about *foreign*-manufactured components, provide a basis for extending the statute's extraterritorial reach to *foreign*-made copies. To the contrary, *expressio unius est exclusio alterius*. Indeed, it would be difficult to envision a patented product that could not be created abroad from foreign replication of its components based on U.S. designs, blueprints, or templates.

AT&T further contends that the presumption against extraterritoriality should not apply because there is no possibility that the extension of Section 271(f) to foreign software production will conflict with foreign intellectual property law. Resp. Br. 44. But even a cursory examination of the international legal landscape demonstrates that the extraterri-

torial application of Section 271(f) could significantly disrupt foreign countries' intellectual property law systems. For example, the United States is the only country in the world where patents are awarded to the first person to develop an invention, rather than to the first person to file a patent application. *See* Br. of Intellectual Property Professors 10. The extension of Section 271(f) to foreign-produced copies could therefore afford extraterritorial patent protection to a U.S. patent holder not entitled to a patent under the first-to-file rule of the foreign country in which the copying took place. Allowing the U.S. patent holder to recover damages under Section 271(f) for foreign-produced copies would displace significantly the foreign country's own decisions regarding the requirements for obtaining patent protection within its territory.

II. AN ABSTRACT SEQUENCE OF BINARY COMMANDS—AN *IDEA*—IS NOT ITSELF A "COMPONENT" THAT CAN BE "COMBIN[ED]" TO INFRINGE AT&T'S PATENT

As AT&T recognized before this Court granted certiorari, "a machine is a 'concrete thing, consisting of parts, or of certain devices and combination of devices.'" Br. in Opp. to Pet. for Cert. 12 (quoting *Burr* v. *Duryee*, 68 U.S. (1 Wall.) 531, 570 (1864)). And, indeed, the case cited by AT&T pointedly did not include among a machine's constituent parts "a 'principle' or a 'mode of operation,' or an *idea*, or any other abstraction." *Burr*, 68 U.S. (1 Wall.) at 570 (emphasis in original). AT&T nevertheless now contends that a *concept*, a *principle*, or an *idea*—object code in the abstract, or "a binary sequence of numbers that 'lacks physical existence'" (Second Supp. Cert. Br. 4)—constitutes a "component" of the speech coding *apparatus* claimed in AT&T's '580 patent. *See* Resp. Br. 13 ("This case turns on . . . [w]hether digital software code—an intangible sequence of '1's' and '0's'—may be considered a 'component[] of a patented invention' within the meaning of Section 271(f)(1).")

(internal quotation marks omitted; brackets in original). Abstract ideas and designs are not statutory "components" of the machines they inspire.

A. The Text Of Section 271(f) Makes Clear That "Components" Must Be Physical

AT&T acknowledges that a statutory "component" must be susceptible to being both "combin[ed]" with other components and "supplie[d] . . . from the United States." Resp. Br. 24, 31.[6] AT&T nevertheless maintains that abstract instructions and other nonphysical items—*ideas*—satisfy both conditions, labeling Microsoft's arguments to the contrary "nonsense" and "sophistry." Resp. Br. 24, 32.

Citing *Webster's Third*, AT&T contends that "[i]t is perfectly natural to speak of combining intangible object code with physical components." Resp. Br. 24. Tellingly, however, AT&T cites no definition or ordinary usage of the verb "to combine" where one object of the verb is physical and another is abstract. This is because while one ordinarily combines physical things to make an invention, *see, e.g.*, *Deepsouth Packing Co.* v. *Laitram Corp.*, 406 U.S. 518, 520-21 (1972), it is impossible "to mix together" an object from the physical realm and an idea from the nonphysical realm. An abstraction, concept, or idea must be reduced to some physical form in order to be combined with a physical thing. Ideas are reduced—etymologically, led back—from the nonphysical ether to a physical medium, and only then are combined with other physical things. Because the other components of the "patented invention" in this case—*i.e.*, the computer hardware that, when programmed, is capable of functioning as a speech decoder—are physical, the component to be combined must also be physical.

---

[6] These concessions render irrelevant AT&T's numerous citations to dictionary definitions and other uses of the term "component" in contexts remote from and unrelated to Section 271(f). *See* Resp. Br. 20-21 nn.10-13.

Similarly, AT&T contends that an abstract idea can be "supplied," even though it is agreed that abstract ideas must be reduced to a physical format before they can be transmitted to others. Pet. Br. 42; Resp. Br. 31. On AT&T's view, even though transmission of abstract ideas requires a "physical-layer container, . . . the object code itself remains the component supplied." Resp. Br. 31. But this is no more than AT&T's *ipse dixit* that the physical device is an irrelevant "container" for an idea. But the "physical-layer" embodiment of an idea is *not* merely a "container" for the idea. To correct one of AT&T's examples, a book entitled *Moby-Dick* is *not* simply a "container" for the narrative of Ishmael. It is a physical manifestation of the abstraction. One cannot pour that narrative—as if it were Coca-Cola—"from one container," such as an original manuscript, "to other containers," such as a paperback edition. The original *copy* persists, as does each subsequent copy.

Moreover, Section 271(f) reinforces the requirement that components be physical, material objects by requiring that they be "supplie[d]" *from* a particular *place*—the United States. While determination of the *source* of a physical embodiment of an idea (or a copy of *Moby-Dick*) might present little difficulty, it makes no sense to ask where an abstract idea, scientific truth, concept, or principle existed at any point in time. *Cf. Dastar Corp.* v. *Twentieth Century Fox Film Corp.*, 539 U.S. 23, 31-32 (2003) (holding that the phrase "origin" of "goods" in the Lanham Act refers to the manufacturer of "the tangible product sold in the marketplace," rather than to the "person or entity that originated the ideas or communications that 'goods' embody"). This paradox—to which AT&T has no response—is amplified here by the fact that a court must determine that the accused infringer supplied "all or a substantial portion of the components"; a court could hope to identify "all" of the abstract components only by reference to the physical components that supposedly embody those ideas. Because only a physical embodiment of

an abstract idea can be "supplie[d] . . . from the United States," this Court should reject AT&T's contention that an abstract sequence may be deemed a statutory component.

B. Abstract Object Code Is Not A Component Of The Speech Coding Apparatus Claimed By The '580 Patent

The '580 patent claims various structures that are capable, when combined, of performing certain speech coding functions. Supp. J.A. 17-19. The patent's apparatus claims are stated in means-plus-function format, and AT&T implicitly concedes—as it must, *see* 35 U.S.C. § 112 ¶ 6; Pet. Br. 41 n.13—that the "elements" of the claimed combination do not include abstract object code, because an "element" must be physical. Resp. Br. 22. But it nevertheless insists that abstract code is a "component"—indeed, "*the* key component" (*id.* at 3) (emphasis in original)—of any infringing apparatus. As the absence of supporting authority indicates, this contention is deeply flawed.

Abstract object code floating in the ether has no functionality whatsoever; it neither performs any speech coding functions nor enables other structural components to do so. *See* Resp. Br. 23. Just as a song must be sung to be heard, a computer program must be en*coded*—hence the terms source *code* and object *code*—into a physical medium before it can program a computer and in so doing transform a general purpose machine into a patentable special-purpose computer that is "physically different from the machine without the program." Br. in Opp. to Pet. for Cert. 11; *see also In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) (en banc). A computer program (object code) in the abstract, to paraphrase AT&T's brief to the Federal Circuit, is "[non]functional, [non]operational, [non]useful, and [non]patentable." Resp. C.A. Br. 13. It is only when the sequence of instructions is reduced to a physical, machine-readable and -executable format that "[s]oftware may . . . be the *structure* correspond-

ing to means-plus-function limitations in a patent claim." Br. in Opp. to Pet. for Cert. 12 (emphasis added).

AT&T objects that the term "component" should not be limited to "'components' that are independently useful or novel before their combination with other components." Resp. Br. 24 (emphasis omitted). This objection assumes—wrongly, as demonstrated above—that mental abstractions can be "combined" with physical objects. More fundamentally, though, it is not for lack of novelty or usefulness that abstract instructions cannot be a component. The point is that abstract instructions are themselves never made part of an infringing structure—only machine-readable and -executable instructions (*i.e.*, physical instantiations of software) are.

C. If Accepted, AT&T's Position Would Radically Transform The U.S. Patent System

1. There is no principled basis for limiting nonphysical "components" to object code. In the first place, software is not to be treated differently under U.S. patent law than any other technology (TRIPS Agreement pt. II, § 5 (1994)), and AT&T concedes that Congress had no such intention when it enacted Section 271(f). Resp. Br. 41. Therefore, if adopted as the holding of this Court, AT&T's position would extend broadly to other abstract information and instructions, with correspondingly grave consequences for the U.S. patent system.

AT&T's own analogies to hypothetically patented books and programmed player pianos signal an acknowledgment that its rationale extends at least to stored content. On AT&T's view, the narrative (content) is a component of a book; the song (content) is a component of a player piano programmed to play that song; and a computer program (content) is a component of a computer configured to execute that program. At the same time, though, AT&T seems to recognize that, properly construed, Section 271(f) does not reach

the export of design information, blueprints, templates, or product specifications, never mind other abstract concepts. *See* Resp. Br. 27. AT&T attempts to distinguish stored content from other design information and instructions on the ground that stored content is "present in the device," while design instructions and information "are not themselves part of the finished product." *Ibid.* "The instructions prescribed by the object code," AT&T argues, "are at all times present within the computer." Resp. Br. 28. That distinction, however, does not withstand scrutiny.

AT&T's proposed distinction fails because it is bottomed on the false premise that an *abstract* computer program can be "present within the computer." Resp. Br. 28. Yet, AT&T acknowledges that object code instructions are "present within the computer" *only* when those instructions are physically embodied in—to use AT&T's terminology—one of the "physical layers" of the computer apparatus. *See* Br. in Opp. to Pet. for Cert. 11 ("When [a computer] is programmed, it is *physically* different from the machine without the program . . . .") (emphasis added). As explained in Microsoft's opening brief, when a computer program is installed, the machine typically stores the object code instruction by aligning pairs of bands of magnetically charged particles on a hard disk with each pair of bands representing a "1" or "0" of the object code and instructing one of the computer's internal switches to open or close. *See* RON WHITE, HOW COMPUTERS WORK 144-45 (8th ed. 2006). Object code instructions cannot be "present within the computer," Resp. Br. 27, if they "'lack[] physical existence,'" Second Supp. Cert. Br. 4.

AT&T cannot have it both ways: It cannot distinguish object code from other design information on the basis that machine-readable object code has physical attributes and is incorporated into a computer, while simultaneously urging that purely abstract object code is the component here at issue. Either AT&T must concede that the physical, machine-

readable instantiation of the object code installed in foreign-manufactured code is the component at issue, or it must acknowledge that its proffered interpretation of "component" encompasses *all* of a patented invention's nonphysical aspects and antecedents.

2. If, as AT&T urges, Section 271(f) is construed to prohibit the export of the nonphysical "components" of patented inventions, it will exponentially enlarge the reach and monopolistic power of U.S. patents.

Through its *Moby-Dick* and *Star Spangled Banner* analogies, AT&T embraces the conclusion that a novel's "unique series of words,"—*i.e.*, its narrative—must be viewed as the key component of any book bearing the novel's title, and that "the intangible arrangement of musical notes"—to wit, a song—must be regarded as a component of an apparatus configured to play that tune. Resp. Br. 26-27. AT&T then tries to soften the blow by asserting that no such device possibly could be patented. *See id.* at 27 n.21. At least with regard to musical devices, however, that assertion is unfounded. For example, U.S. Patent No. 4,554,856, entitled "Music Box With Indicator Hoist Mechanism," claims an apparatus whose "projections and . . . vibration plate cooperate to play musical notes representative of a country's *national anthem*." *Id.* col.4 *ll.*30-34 (filed Mar. 5, 1984) (claim no. 8) (emphasis added). Therefore, on AT&T's view, the national anthem is a "component" of the music box in the '856 patent, and Section 271(f), at least in some circumstances, bars exportation even of music.

But music is not all. A computer programmed with software is no different from any other machine that has physical components that instruct other components to perform a function, like the gears of a watch that instruct the hands and date indicators to move in a certain way or the lobes on a camshaft that instruct the valves of an engine to open or close.

Moreover, if the term "component" encompasses nonphysical things, it most certainly reaches the design of any patented invention that derives its novelty and utility from its design rather than its physical components. For example, in *Mercoid Corp.* v. *Minneapolis-Honeywell Regulator Co.*, 320 U.S. 680 (1944), the patent-in-suit claimed "a system of hot air furnace control." *Id.* at 682. The system structure was comprised exclusively of unpatented thermostats and switches. The inventor's "'advance in the art' was the *arrangement* of thermostatic switches" to achieve certain useful functionality. *Id.* (emphasis added). Similarly, in *Diamond* v. *Diehr*, 450 U.S. 175 (1981), the patent-in-suit claimed a process for curing synthetic rubber according to the "Arrhenius equation." *Id.* at 177. If a "component" need not be physical, designs like that at issue in *Mercoid* must be considered the central "components" of claimed systems, and "when a claim recites a mathematical formula (or scientific principle or phenomenon of nature)," and "implements or applies that formula in a structure or process," that formula similarly must be considered a component of the claimed invention. *Id.* at 191, 192.

It follows necessarily from AT&T's all-encompassing construction of "component" that, at least where the claimed invention is (as here and in *Mercoid*) a "combination or composition," a patentee also may use Section 271(c)'s contributory infringement provision to prohibit others from selling such design information domestically, or even importing it. *See* 35 U.S.C. § 271(c). And although Section 271(c) has been on the books since 1952 (and the doctrine of contributory infringement long before that), AT&T cites no case in which the sale of a design or some other nonphysical antecedent to an invention resulted in contributory infringement of a patent under that provision.[7]

---

[7] And here, AT&T stipulated to dismissal of its claim for contributory infringement under Section 271(c). Pet. App. 42a ¶ 2.

To return to an example from the opening brief (to which AT&T, tellingly, has offered no response), under AT&T's view of the law, exportation of a single copy of the '580 patent—itself merely a vessel for the source code, *i.e.*, design information, "it contains" (Resp. Br. 29)—could give rise to Section 271(f) liability. Exportation of the patent at issue in *Mercoid*—again, on AT&T's view, no more than a container for the design information it discloses—similarly would trigger Section 271(f) liability if it induced the foreign recipient to practice the combination invention claimed in the patent. And sale of copies of either patent by the Patent and Trademark Office could give rise to contributory infringement liability under Section 271(c). *See* 35 U.S.C. § 41(d)(3) (requiring the Director of the Patent and Trademark Office to charge "[f]or each black and white copy of a patent, $3").

AT&T has pointed to nothing that even remotely suggests that Congress, by enacting a provision to close the patent-law loophole identified by this Court in *Deepsouth*, intended so sweeping a revision of the patent laws, engendering such a bizarre collection of absurd results. And this Court, of course, will avoid construing the statute in a way that produces such absurd results. *Dewsnup* v. *Timm*, 502 U.S. 410, 427 (1992). AT&T's argument boils down to a request that this Court *extend* Section 271(f) to a context that Congress never contemplated. Indeed, the Federal Circuit acknowledged that it was doing just that. Pet. App. 10a ("Section 271(f), if it is to remain effective, must . . . be interpreted in a manner that is appropriate to the nature of the technology at issue."). But the extension of the patent laws is for Congress, not the Judiciary. *See Parker* v. *Flook*, 437 U.S. 584, 595-96 (1978).

3. AT&T paints Microsoft's arguments in this case as an attempt to obtain special treatment for software companies and to secure a judicial "repeal" of Section 271(f) for software-related inventions. AT&T has it precisely backward.

Microsoft's argument in this case is premised on the notion that software components should be treated no differently under Section 271(f) than the components of any other types of inventions. Just as a manufacturer of a shrimp deveining machine would not be liable under Section 271(f) if it exported templates or molds of each of the machine's component parts to be used by foreign companies to manufacture copies of each component for final assembly abroad, Microsoft is not liable for sending master versions of its Windows object code to foreign manufacturers for replication and installation in foreign-assembled computers. In neither is a component of the patented invention supplied from the United States. This evenhanded application of Section 271(f) to software-related inventions—which is required by treaty (TRIPS Agreement pt. II, § 5)—cannot fairly be characterized as "special treatment," notwithstanding AT&T's vehement protestations to the contrary.

Moreover, a decision in favor of Microsoft would not immunize software companies from liability under Section 271(f). To the contrary, U.S. software companies could be liable under Section 271(f) when they supply from the United States the physical software media (such as hard drives) that are actually—rather than "essentially"—combined with computer hardware as physical parts of a patented programmed-computer invention. Pet. Br. 34 n.9; *see also* U.S. Br. 25 n.2. Similarly, U.S. software companies could be liable under Section 271(c) when they sell within the United States physical software media that are combined as physical parts of patented programmed-computer inventions. *See* 35 U.S.C. § 271(c). And in cases where a software company also sells a device incorporating the software—such as a videogame console—the U.S. software company could be liable under Section 271(a) for manufacturing the physical media in the United States. *See* 35 U.S.C. § 271(a). In any case, the ultimate liability determination would depend on whether the U.S.-manufactured physical medium either in-

fringes a claim of the asserted patent, or whether it does so when it is combined with other components—an inquiry that necessarily depends on the particular claims of the particular patent. That Section 271(f) does not reach U.S. persons who *design* software rather than *manufacture* the software-encoded media is an insufficient argument for its judicial revision.

A ruling in favor of Microsoft would not alter the fact that U.S. software companies could be subject to liability under Section 271(f) if they—like their counterparts in other industries—ship physical, functional components of a patented invention from the United States with the intention that those same components be combined overseas to form a patented invention, but are not liable under Section 271(f) if they—like their counterparts in other industries—ship templates or design information abroad with the intention that *copies* be made overseas for installation into foreign-made devices. A ruling in favor of AT&T, by contrast, would either put software companies on a different footing than their competitors in other industries, in derogation of the fundamental rule that the patent laws are technology-neutral, or vastly expand the reach of U.S. patents to the foreign replication of components of all manner of patented products designed in the United States.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted.

T. ANDREW CULBERT
MICROSOFT CORPORATION
One Microsoft Way
Redmond, WA 98052
(425) 706-6921

DALE M. HEIST
WOODCOCK WASHBURN LLP
2929 Arch Street
Philadelphia, PA 19104
(215) 564-8939

THEODORE B. OLSON
Counsel of Record
MIGUEL A. ESTRADA
MARK A. PERRY
MATTHEW D. MCGILL
AMIR C. TAYRANI
GIBSON, DUNN & CRUTCHER LLP
1050 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 955-8500

Counsel for Petitioner

February 14, 2007